

Listing of Claims:

1. (Currently Amended) An organic crystal observing and working method in which an organic crystal is observed by irradiation with light other than ultraviolet light and is worked by irradiation with ultraviolet short-pulse laser light, wherein
5 both observation and working are performed while maintaining a low-temperature state in which ~~[[the]]~~ a portion of ~~this~~ the organic crystal being worked is cooled to a low temperature.

2. (Currently Amended) An organic crystal observing and working method in which an organic crystal is observed by irradiation with light other than ultraviolet light and is worked by irradiation with ultraviolet short-pulse laser light, wherein
5 both observation and working are performed while maintaining a low-temperature state in which ~~the~~ portions of ~~this~~ the organic crystal and a substance holding ~~this~~ the organic crystal that are being worked are cooled to a low temperature.

3. (Currently Amended) The organic crystal working method according to claim 1 or 2, wherein the ~~state in which the crystal is cooled to a~~ low temperature is 0°C or below.

4. (Currently Amended) The organic crystal working method according to claim 1 or 2, wherein ~~the method for maintaining~~ the portion of the organic crystal that is being worked or the portions of the organic crystal and the substance holding ~~this~~
5 the organic crystal that are being worked are maintained in [[a]] the low-temperature state [[is]] by a method in which a low-temperature gas is caused to jet directly or indirectly onto an area that includes the ~~portion(s)~~ portion or portions where ~~this~~ the low-temperature state is to be maintained.

5. (Original) The organic crystal working method according to claim 3, wherein the low-temperature gas is either a nitrogen gas or helium gas.

6. (Original) The organic crystal working method according to claim 1 or 2, wherein the organic crystal is at least one crystal selected from a set consisting of organic low molecules, organic supramolecular complexes, resins, proteins, sugars, lipids and nucleic acids.

7. (Currently Amended) The organic crystal working method according to claim 1 or 2, wherein the ~~form of working is~~ working ~~that~~ is performed from [[the]] a surface of the organic crystal

or [[the]] surfaces of the organic crystal and the substance holding ~~this~~ the organic crystal.

8. (Currently Amended) The organic crystal working method according to claim 1 or 2, wherein [[the]] a wavelength of the short-pulse laser light is shorter than [[the]] an absorption end on [[the]] a short-wavelength side of the organic crystal.

9. (Currently Amended) The organic crystal working method according to claim 1 or 2, wherein [[the]] a wavelength of the short-pulse laser light is 400 nm or less.

10. (Currently Amended) The organic crystal working method according to claim 1 or 2, wherein [[the]] a pulse width of the short-pulse laser light is 100 ns or less.

11. (Currently Amended) The organic crystal working method according to claim 1 or 2, wherein [[the]] an energy density per pulse of the short-pulse laser light is 1 mJ/cm² or greater.

12. (Currently Amended) An organic crystal working apparatus for working organic crystals, ~~wherein this~~ the organic crystal working apparatus ~~has~~ comprising:

a short-pulse laser,

5 an optical system which conducts ~~[[the]]~~ ultraviolet
short-pulse laser light emitted from ~~this~~ the short-pulse laser
to an organic crystal constituting ~~[[the]]~~ an object of working,
and which irradiates ~~[[the]]~~ a location of ~~this~~ the organic
crystal that is being worked,

10 a mechanism that varies ~~[[the]]~~ relative positions of the
optical system and the organic crystal, and

~~[[a]]~~ means for cooling the object of working to a low
temperature, ~~[[and]]~~

 wherein the apparatus is configured such that the organic
15 crystal is observed by irradiation with light other than
ultraviolet light and worked by irradiation with the ultraviolet
short-pulse laser light, while the organic crystal is cooled to
the low temperature.

13. (Currently Amended) The organic crystal working
apparatus according to claim 12, wherein the means for
~~maintaining cooling the object of working in a low-temperature~~
~~state is a to the low temperature comprises means in which for~~
5 causing a low-temperature gas ~~is caused~~ to jet onto the organic
crystal or a container holding ~~this~~ the organic crystal ~~[[in]]~~ at
a position where ~~this~~ the organic crystal is being worked.

14. (Currently Amended) The organic crystal working apparatus according to claim 12, wherein the means for ~~maintaining cooling the object of working in a low-temperature state is~~ to the low temperature comprises a cooling container
5 that accommodates the organic crystal or a container holding ~~this~~ the organic crystal ~~[[in]]~~ at a position where ~~this~~ the organic crystal is being worked.

15. (Currently Amended) The organic crystal working apparatus according to claim 12, wherein ~~this~~ the organic crystal working apparatus ~~[[has]]~~ includes an observation device or measuring device for observing or measuring the ~~position~~ location
5 where the short-pulse laser light is irradiated, simultaneously with the organic crystal.

16. (Currently Amended) The organic crystal working apparatus according to claim 15, wherein the observation device or measuring device is an optical observation device or optical measuring device using visible light, ~~this~~ the observation device
5 or measuring device is in a mechanically fixed relationship with the optical system, ~~[[the]]~~ a reference point of the observation device or measuring device coincides with the ~~position~~ location where the short-pulse laser light is irradiated, and the apparatus has ~~[[the]]~~ a function of indirectly observing or

10 measuring ~~this~~ the short-pulse laser light irradiation ~~position~~
location by observing or measuring ~~[[the]]~~ a position of the
reference point of the observation device or measuring device.

17. (Currently Amended) An organic crystal observation
device, ~~wherein~~ comprising the organic crystal working apparatus
according to claim 12 ~~is incorporated~~.

18. (Original) The organic crystal observation device
according to claim 17, wherein the observation device is an X-ray
crystal structure analysis device.